Scenario: #1 - Hand Removal

Scenario Description:

Using hand tools, such as axes, shovels, hoes, nippers, to remove or cut off herbaceous plants at or below the root collar. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have herbaceous weed species that are in the early phases of invasions. Typical unit is 10 acres.

Before Situation:

Area is in the very early phases of herbaceous weed encroachment that degrades habitat for desired wildlife species. Future degradation of key forage species and ecological site condition promoting noxious and invasive species and increased soil erosion if woody species are allowed to expand.

After Situation:

Herbaceous weeds are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition continues to progressing in an upward trend, hydrology and plant health and vigor are sustained.

Scenario Feature Measure: Acres treated

Scenario Unit: Acre

Scenario Typical Size: 10

Scenario Cost: \$671.17 Scenario Cost/Unit: \$67.12

Cost Details (by catego	ry):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$30.91	5	\$154.55
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.50	1	\$37.50
Pruning tools, hand tools	1318	Pruning tools, hand tools, shears, loppers, pole saw, handsaw. Material costs only. Labor not included.	Hour	\$4.77	16	\$76.32
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$37.01	1	\$37.01
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.41	16	\$294.56
Mobilization			•	·		
Mobilization, very small equipment	1137	Equipment that is small enough to be transported by a pick up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	- Each	\$71.23	1	\$71.23

Practice: 315 - Herbaceous Weed Control Scenario: #2 - Hand removal and chemical

Scenario Description:

Using hand tools, such as axes, shovels, hoes, nippers, to remove or cut off herbaceous plants at or below the root collar. Herbicide is applied to control re-growth of target weeds. Typical area is moderate rolling to gentle sloping, moderately deep to deep soils that have herbaceous weed species that are in the early phases of invasions. Typical unit is 10 acres.

Before Situation:

Area is in the very early phases of herbaceous weed encroachment that degrades habitat for desired wildlife species. Future degradation of key forage species and ecological site condition promoting noxious and invasive species and increased soil erosion if woody species are allowed to expand.

After Situation:

Herbaceous weeds are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition continues to progressing in an upward trend, hydrology and plant health and vigor are sustained.

Scenario Feature Measure: Acres treated

Scenario Unit: Acre

Scenario Typical Size: 10

Scenario Cost: \$1,400.47 Scenario Cost/Unit: \$140.05

Cost Details (by category	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$30.91	5	\$154.55
Pruning tools, hand tools		Pruning tools, hand tools, shears, loppers, pole saw, handsaw. Material costs only. Labor not included.	Hour	\$4.77	16	\$76.32
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.50	1	\$37.50
Chemical, spot treatment, single stem application		Ground applied chemical to individual plants or group of plants, e.g., backpack sprayer treatment. Equipment and labor cost included.	Hour	\$57.30	10	\$573.00
Labor						
General Labor		Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$18.41	16	\$294.56
Supervisor or Manager		Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$37.01	1	\$37.01
Materials	•					•
Herbicide, Glyphosate		A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.63	10	\$156.30
Mobilization						
Mobilization, very small equipment		Equipment that is small enough to be transported by a pick- up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$71.23	1	\$71.23

Practice: 315 - Herbaceous Weed Control Scenario: #4 - Mechanical and Chemical

Scenario Description:

Removal of herbaceous weeds of light infestations on gentle sloping to moderately deep to deep soils. The practice entails the removal of herbaceous weeds by the use of mower, brush hog, disc or other light equipment in order to reduce fuel loading and improve ecological site condition, then applying herbicide to control re-growth of target weeds. Weed has exceeded desired levels based on ecological site potential. Typical unit is 40 acres.

Before Situation:

Area consist of excessive stands of herbaceous weeds degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Situation:

Herbaceous weeds are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure: Acres treated

Scenario Unit: Acre

Scenario Typical Size: 20

Scenario Cost: \$2,058.00 Scenario Cost/Unit: \$102.90

Cost Details (by category):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Mower, Bush Hog	940	Equipment and power unit costs. Labor not included.	Hour	\$51.24	8	\$409.92
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.86	20	\$117.20
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.50	2	\$75.00
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$30.91	5	\$154.55
Labor			•		•	•
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$20.40	8	\$163.20
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$37.01	1	\$37.01
Materials						
Herbicide, Surfactant	1095	Surfactants reduce the surface tension of water to produce more uniform coverage and penetration of herbicides, and weed killers. Paraffin Based Petroleum Surfactant. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$1.32	20	\$26.40
Herbicide, Imazapyr	336	Pre and post-emergent, non-selective herbicide for control of undesirable vegetation in non-crop areas. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$41.50	20	\$830.00
Mobilization						
Mobilization, very small equipment	1137	Equipment that is small enough to be transported by a pick- up truck with typical weights less than 3,500 pounds. Can be multiple pieces of equipment if all hauled simultaneously.	Each	\$71.23	1	\$71.23
Mobilization, small equipment	1138	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$173.49	1	\$173.49

Scenario: #5 - Chemical, Spot

Scenario Description:

Land unit on which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve forage conditions for domestic livestock or wildlife. The practice entails the eradication of vegetation by use of weed treatment, either initial or retreatment using hand-carried equipment (such as a backpack and hand-sprayer) to apply chemicals, in order to eliminate noxious weeds, promote forage productivity, and improve ecological condition.

Before Situation:

Area consist of excessive stands of herbaceous weeds degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Situation:

Herbaceous weeds are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure: Acres treated

Scenario Unit: Acre

Scenario Typical Size: 20

Scenario Cost: \$1,180.24 Scenario Cost/Unit: \$59.01

Cost Details (by category	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.50	2	\$75.00
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$30.91	20	\$618.20
Labor						
Supervisor or Manager		Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$37.01	4	\$148.04
Materials			•	·		
Herbicide, Surfactant		Surfactants reduce the surface tension of water to produce more uniform coverage and penetration of herbicides, and weed killers. Paraffin Based Petroleum Surfactant. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$1.32	20	\$26.40
Herbicide, Glyphosate		A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$15.63	20	\$312.60

Scenario: #6 - Chemical, Ground

Scenario Description:

Land unit on which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve forage conditions for domestic livestock or wildlife. The practice entails the eradication of vegetation by use of weed treatment using ground equipment to apply chemicals, in order to eliminate noxious weeds, promote forage productivity, and improve ecological condition.

Before Situation:

Area consist of excessive stands of herbaceous weeds degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Situation:

Herbaceous weeds are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure: Acres treated

Scenario Unit: Acre

Scenario Typical Size: 20

Scenario Cost: \$1,121.64 Scenario Cost/Unit: \$56.08

Cost Details (by category	·):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acre	\$5.86	20	\$117.20
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$37.01	4	\$148.04
Materials						
Herbicide, Imazapyr	336	Pre and post-emergent, non-selective herbicide for control of undesirable vegetation in non-crop areas. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$41.50	20	\$830.00
Herbicide, Surfactant	1095	Surfactants reduce the surface tension of water to produce more uniform coverage and penetration of herbicides, and weed killers. Paraffin Based Petroleum Surfactant. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$1.32	20	\$26.40

Scenario: #7 - Chemical, Aerial

Scenario Description:

Land unit on which weed control would be beneficial in order to set back the plant community succession, improve the ecological condition, and improve forage conditions for domestic livestock or wildlife. The practice entails the eradication of vegetation by use of weed treatment using airplane or helicopter to apply chemicals, in order to eliminate noxious weeds, promote forage productivity, and improve ecological condition.

Before Situation:

Area consist of excessive stands of herbaceous weeds degrading health and vigor of native herbaceous species promoting noxious and invasive species and degrading wildlife habitat.

After Situation:

Herbaceous weeds are removed to achieve the desirable plant community based on species composition, structure, density, and canopy cover or height. Ecological site condition is progressing in an upward trend, hydrology and plant health and vigor is returning to near normal levels, and improved wildlife habitat.

Scenario Feature Measure: Acres treated

Scenario Unit: Acre

Scenario Typical Size: 20

Scenario Cost: \$1,621.04 Scenario Cost/Unit: \$81.05

Cost Details (by categor	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Chemical, aerial application, helicopter	1991	Chemical application performed by helicopter on forest only. Includes equipment, mobilization, and labor.	Acre	\$30.83	20	\$616.60
Labor						
Supervisor or Manager	234	Labor involving supervision or management activities. Includes crew supervisors, foremen and farm/ranch managers time required for adopting new technology, etc.	Hour	\$37.01	4	\$148.04
Materials						
Herbicide, Imazapyr	336	Pre and post-emergent, non-selective herbicide for control of undesirable vegetation in non-crop areas. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$41.50	20	\$830.00
Herbicide, Surfactant	1095	Surfactants reduce the surface tension of water to produce more uniform coverage and penetration of herbicides, and weed killers. Paraffin Based Petroleum Surfactant. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acre	\$1.32	20	\$26.40